

Application No. 09/471,189
Amendment dated _____
Reply to Office Action of March 2, 2004

Docket No. 0505-0590P
Art Unit: 2684
Page 2 of 12

CLAIM SET AS AMENDED

1. (Currently Amended) A vehicular communication apparatus comprising:

~~at least one helmet~~ helmets worn by an operator and a rear passenger of a vehicle, each of said at least one helmet incorporated with helmets including a helmet side infrared ray transmitter/receiver mounted on a lower central portion thereof, speaker and a microphone mounted thereon, and further including a mounted helmet side infrared transmitter/receiver connected to the speaker and the a microphone connected to the helmet side infrared ray transmitter/receiver;

a vehicle body provided with a vehicle body side infrared ray transmitter/receiver for carrying out infrared communication with between each of the helmet side infrared transmitter/receiver ray transmitter/receivers;

wireless communication means connected to the vehicle body side infrared ray transmitter/receiver and arranged with communication operating means separately from the wireless communication means in at a position operably accessible to the operator during operation of the vehicle; and

the vehicle body side infrared ray transmitter/receiver being disposed on a rear surface of a handlebar adjacent to the grip so that signals emitting from/to the vehicle body side infrared ray transmitter/receiver pass directly over a shoulder of the operator of the vehicle to/from a the helmet of a the rear passenger of the vehicle.

Application No. 09/471,189
Amendment dated _____
Reply to Office Action of March 2, 2004

Docket No. 0505-0590P
Art Unit: 2684
Page 3 of 12

2. (Previously Presented) The vehicular communication apparatus according to claim 1, further comprising a frequency selecting dial above the communication operating means.

3. (Currently Amended) The vehicular communication apparatus according to claim 1, wherein the vehicle is a handlebar type vehicle, the vehicle body side infrared ray transmitter/receiver is arranged at a position offset to either a left side and a right side of the handlebar; and the helmet side infrared ray ~~transmitter/receiver is~~ transmitter/receivers are arranged at least at a lower central portion of a front face of the helmet helmets.

4. (Original) The vehicular communication apparatus according to claim 3, wherein the communication operating means arranged at the vicinity of the grip is combined with the vehicular side infrared ray transmitter /receiver to thereby constitute an integrated module.

5. (Original) The vehicular communication apparatus according claim 1, further comprising a display unit for indicating a transmitting/receiving state of the wireless communication means, said display unit disposed in a vicinity of the grip of the handlebar.

Application No. 09/471,189
Amendment dated _____
Reply to Office Action of March 2, 2004

Docket No. 0505-0590P
Art Unit: 2684
Page 4 of 12

6. (Currently Amended) A vehicular communication apparatus comprising:

~~at least one helmet~~ helmets worn by an operator and a rear passenger of a vehicle, each
of said at least one helmet incorporated with helmets including a helmet side infrared ray
transmitter/receiver mounted on a lower central portion thereof, speaker and a microphone
mounted thereon, and further including a mounted helmet side infrared transmitter/receiver
connected to the speaker and the a microphone connected to the helmet side infrared ray
transmitter/receiver;

wireless communication means connected to the helmet side infrared ray
~~transmitter/receiver~~ transmitter/receivers, said wireless communication means being carried or
attached to the operator;

a vehicle body mounted with a vehicle body side infrared ray transmitter/receiver for
carrying out infrared communication ~~with~~ between the helmet side infrared ray
~~transmitter/receiver~~ transmitter/receivers and arranged with communication operating means
separately from the wireless communication means at a position operably accessible to the
operator during operation of the vehicle; and

the vehicle body side infrared ray transmitter/receiver being disposed on a rear surface
of a handlebar adjacent to the grip so that signals emitting from/to the vehicle body side infrared
ray transmitter/receiver pass directly over a shoulder of the operator of the vehicle to/from a the
helmet of a the rear passenger of the vehicle.

*Application No. 09/471,189
Amendment dated April 19, 2004
Reply to Office Action of March 2, 2004*

*Docket No. 0505-0590P
Art Unit: 2684
Page 5 of 12*

7. (Previously Presented) The vehicular communication apparatus according to claim 7, further comprising a frequency selecting dial above the communication operating means.

8. (Original) The vehicular communication apparatus according to claim 7, wherein the vehicle is a handlebar type vehicle, the vehicle body side infrared ray transmitter/receiver is arranged at a position offset to either a left side and a right side of the handlebar; and the helmet side infrared ray transmitter/receiver is arranged at least at a central front face of the helmet.

9. (Original) The vehicular communication apparatus according to claim 9, wherein the communication operating means arranged at the vicinity of the grip is combined with the vehicular side infrared ray transmitter /receiver to thereby constitute an integrated module.

10. (Original) The vehicular communication apparatus according claim 7, further comprising a display unit for indicating a transmitting/receiving state of the wireless communication means, said display unit disposed at a vicinity of the grip of the handle bar.

11. (Currently Amended) A vehicular communication apparatus, comprising:

a helmet worn by a passenger of a handlebar type small-sized vehicle, said helmet incorporated with a speaker and a microphone and mounted with a helmet side infrared ray transmitter/receiver connected to the speaker and the microphone;

*Application No. 09/471,189
Amendment dated April 19, 2004
Reply to Office Action of March 2, 2004*

*Docket No. 0505-0590P
Art Unit: 2684
Page 6 of 12*

a vehicle body is arranged with a vehicle body side infrared ray transmitter/receiver for carrying out infrared ray communication with the helmet side infrared ray transmitter /receiver; and

a cabinet having a shape that is substantially rectangular disposed along a section of a rear surface of a handlebar adjacent to a grip, the cabinet housing the vehicle body side transmitter/receiver, a light emitting element, a light receiving element, a visual display, and communication operating means,

the light emitting element and the light receiving element being disposed above the visual display on a rear face of the cabinet.

12. (Previously Presented) The vehicular communication apparatus according claim 5, further comprising a light receiving element above the display unit.

13. (Previously Presented) The vehicular communication apparatus according claim 10, further comprising a light receiving element above the display unit.

14. (New) The vehicular communication apparatus according claim 10, wherein the helmet side infrared ray transmitter/receiver is arranged in a cabinet mounted on a lower central portion of a front face of the helmet.